

Notice of Allowability

Application No.

10/672,549

Examiner

Thomas R. Peeso

Applicant(s)

SCOTT ET AL.

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application papers filed.
2. ☒ The allowed claim(s) is/are 1-67.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date See Continuation Sheet
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Thomas R Peeso
Primary Examiner
Art Unit: 2132

Continuation of Attachment(s) 3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date: 11Aug2004, 02Nov2004,
21Jan2005,
30Jan2006.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

Applicant has claimed uniquely distinct features in the instant invention which are not found in the prior art, either singularly or in combination. According to the invention, a process plant includes a safety system that is physically and logically integrated with a process control system in a manner that enables the safety system and the process control system to use common communication, configuration, diagnostic and display hardware and software within the process plant while still providing functional isolation between the safety system controllers and the process control system controllers. As is typical, separate safety system controllers are connected via safety communication infrastructure to safety field devices while process control system controllers are connected to control system field devices via standard control system busses or communication lines. However, the safety system controllers are communicatively connected to the process control system controllers via a bus or other communication channel and each is connected to one or more operator workstations within the process plant via a common communication network, which enables software within the operator workstations to communicate with, configure and view the operation of both the process control system controllers (and related process control field devices) and the safety system controllers (and related safety field devices).

This integration includes using a common data communication structure for both the safety system and the process control system so that applications can send data to and receive data from devices in either system in the same manner, e.g., using the same communication hardware and software. However, the common data communication structure may distinguish process control devices from safety devices using tags, addresses or other fields within the messages sent to or received from the devices, which enables data associated with the process control system to be distinguishable from data associated with the safety system, thereby enabling an application within a user interface to automatically treat this data differently depending on the source (or destination) of the data. In one example, display, configuration, control and diagnostic applications may enable writes to be performed to (or reads to be made from) both the process control system devices and the safety system devices, while automatically enforcing security procedures on the writes to the safety system devices that are not needed for the writes to the process control system devices, or vice versa. These writes may be enabled, however, from the same display that distinguishes writes to the safety system from writes to the process control system based on the field of the display into which the data to be written is placed. In this manner, the display, configuration, control and diagnostic applications can make writes to either system without the need to map data from the process control system to the safety system or vice versa.

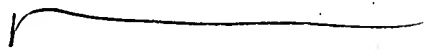
Additionally, configuration and diagnostic applications can provide a common interface for performing configuration and diagnostic activities within the process plant for both the process control system and the safety system. In particular, a configuration application may enable a user to configure either or both of the process control system and the safety system and may store the configuration information in common database with known associations between the process control system devices (logic) and the safety system devices (logic) to make it easier to understand the interrelationships between the control system configuration and the safety system configuration. Still further, a common configuration screen may display both process control system configuration information and safety system configuration information and data generated in one of these systems may be used in the configuration or implementation of the other one of these systems without separate mapping procedure being performed. This common or integrated configuration application makes it easier to configure the entire plant using a single configuration application which, in turn, eliminates the need to train the same or separate users on different configuration applications.

These features are not found or suggested in the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas R. Peeso whose telephone number is 571 272-3809. The examiner can normally be reached on Mon.-Fri, 7:00 a.m. to 3:30 p.m. The central fax number for the office is 571 273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron, can be reached on 571 272-3799. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Thomas R. Peeso
Primary Examiner

19 February 2007